UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,686	03/30/2000	Daniel Watkins	99-245	8454

24319 7590 05/21/2004

LSI LOGIC CORPORATION
1621 BARBER LANE
MS: D-106 LEGAL
MILPITAS, CA 95035

EXAMINER	
NGUYEN, HUY THANH	
ART UNIT	**PAPER NUMBER**
2615	

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/539,686	WATKINS, DANIEL	
	Examiner	Art Unit	
	HUY T NGUYEN	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) *37-41* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30,32-36 and 42-50* is/are rejected.

7)☒ Claim(s) *31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-36 and 42-50 in Paper No. 4 filed 04 March 2004 is acknowledged. The traversal is on the ground(s) that the invention must be independent and distinct and they must be serious burden on the examiner if the restriction is not required . This is not found persuasive because the invention of Group I requires a capture unit for capturing a portion of the AV signal and that is not required for Group II and Group II directs to DVD player that having means for changing the resolution of AV signal that is not required by Group I. Since the Group I and Group II are independent from each other and classified in different subclass, they must be serious burden on the examiner if the restriction is not required

The requirement is still deemed proper and is therefore made FINAL. Accordingly claims 37-41 are withdrawn from further consideration

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claim 1,2, 10-12 , 15, 42, 43 ,45 are rejected under 35 U.S.C. 102(e) as being anticipated by Maruyama et al (6,385,389).

Regarding claim 1, 2, 15, 42 , 45, Maruyama discloses a device used as a DVD rcording and play the AV signal (Figs. 19, column 24, lines 21-22 to column 25, line 20, column 37) for receiving and playing back audio/visual (AN) content from one or more sources of transmitted A/V content comprising: one or more receivers of A/V content each having an AV input and an A/V signal converter (53), the AV inputs selectively receiving transmitted A/V content from the sources, and the A/V signal converters converting the transmitted AV content into digital AV signals, a video display circuit (46) coupled to the receivers and having an input, a video output and a video encoding circuitry, the input receiving a video portion of the digital A/V signals from a selected one of the receivers, the video encoding circuitry converting the video portion into a display signal, and the video output emitting the display signal at least one content capture unit coupled to the receivers and comprising a close caption (subpicture) data slicker (55) that extracts CC content from the AV content, a digitized audio capturing unit (54) that extracts audio content from the A/V content, or a video still image capture unit that extracts a still image (representative picture) from the A/V content, the content capture unit receiving at least a portion of the digital AV signals, capturing part of the digital AN signals and outputting the captured part of the digital AV signals; and a captured content storage unit (10) coupled to the content capture unit and comprising memory storage space (DVD) , the memory storage space receiving and storing the captured part of the digital A/V signals from the content capture unit.

Regarding claim 10, Maruyama teaches the sources of transmitted AV content comprise a DVD source, a broadcast programming source, a web programming site, or a combination thereof.

Regarding claim 11, Maruyama further teaches the receivers further comprise a DVD receiver for receiving DVD content from the DVD source, a TV tuner for receiving broadcast programming from the broadcast programming source, a web browser for receiving web programming from the web programming site, or a combination thereof.

Regarding claim 12, Maruyama further teaches the A/V signal converters further comprise a DVD decoder within the DVD receiver, a video analog-to-digital converter (ADC), an audio ADC connected to the TV tuner, a web browser program within the web browser, or a combination thereof.

Regarding claim 43, Maruyama further teach a conventional broadcast television source (tuner) .

4. Claim 15, 42 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Orr (6430357).

Regarding claim 15, Orr teaches a method for processing A/V content in an A/V device comprising the steps of: providing an A/V channel; receiving an AV signal from the AN channel, capturing a portion of the A/V signal, wherein the portion of the A/V signal comprises a CC portion, an audio portion, a video still image, or a combination thereof; and storing the captured portion of the AN signal (column 2, line 15 to column 3, line 10).

Regarding claim 42, Orr teaches a digital versatile disk (DVD) player (Fig. 1-3) for playing back an audio/visual (AV) signal comprising : a source of the signal, the AV signal comprising close caption (CC) content, audio content and video content, at least one content capture unit coupled to the source of the AN signal, the content capture unit receiving at least a portion of the AN signal and capturing part of the AN signal, and each content capture unit comprising: a CC data slicer, an audio capture unit, a video still image capture unit; or a combination thereof; and a captured content storage unit coupled to the content capture unit and comprising memory storage space, the memory storage space receiving the captured part of the A/V signal from the content capture unit and storing the captured part of the AV signal (column 2, lines 15 to column 3, lines 10).

5. Claim 1, 2 ,3,5,7,8,9,15,16,18,21-27,45-46 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Corey et al (5,703,655).

Regarding claims 1,2 and 15, Corey discloses a device for receiving and playing back audio/visual (AN) content from one or more sources of transmitted A/V content comprising: one or more receivers of A/V content each having an AV input and an A/V signal converter (36), the AV inputs selectively receiving transmitted A/V content from the sources, and the A/V signal converters converting the transmitted AV content into digital AV signals, a video display circuit coupled to the receivers and having an input, a video output and a video encoding circuitry, the input receiving a video portion of the digital A/V signals from a selected one of the receivers, the video encoding circuitry converting the video portion into a display signal, and the video output emitting

the display signal-, at least one content capture unit coupled to the receivers and comprising a close caption (CC) data slicer (52) that extracts CC content from the AV content, a digitized audio capturing unit that extracts audio content from the A/V content, or a video still image capture unit that extracts a still image from the A/V content, the content capture unit receiving at least a portion of the digital AV signals, capturing part of the digital AN signals and outputting the captured part of the digital AN signals; and a captured content storage unit coupled to the content capture unit and comprising memory storage space (72) , the memory storage space receiving and storing the captured part of the digital A/V signals from the content capture unit (column 3, lines 37-67, column 4, lines 1--38) .

Regarding claim 15, Corey teaches a method for processing A/V content in an A/V device comprising the steps of: providing an A/V channel; receiving an AV signal from the AN channel, capturing a portion of the A/V signal, wherein the portion of the A/V signal comprises a CC portion, an audio portion, a video still image, or a combination thereof; and storing the captured portion of the AN signal (column 3, lines 37-67, column 4, lines 1--38).

Regarding claim 2, Corey further teaches the CC data slicer receives a video portion of the digital A/V signals and extracts and captures a CC content part of the video portion , the digitized audio capturing unit receives an audio portion of the digital AN signals and captures a part of the audio portion; and the video still image capture unit receives the video portion of the digital A/V signals and captures a video still image part of the video portion (column 4, lines 30-35).

Regarding claims 3,16 and 46 , Corey further teaches the receivers scan through a plurality of selected sources of AV content and send at least a portion of the digital AV signals corresponding to each selected source to the content capture unit to capture part of the digital AN signals, for each selected source (column 4, lines 35-68).

Regarding claims 4 and 17, Corey further teaches a search engine that receives and searches through the captured part of the digital AN signals for each selected Source to locate a match with user search criteria (column 7, lines 4-68).

Regarding claims 5,18 and 48 Corey further teaches the user search criteria comprises textual criteria related to the CC content captured by the CC data slicer, audio criteria related to the pail of the audio portion captured by the digitized audio capturing unit, video criteria related to the video still image captured by the video still image capture unit, or a combination thereof (column 7, lines 40-68) .

Regarding claims 7 and 22, Corey further teaches comprising response instructions to be followed upon the location of a match (column 8, lines 40-50).

Regarding claim 8,23 and 24-25 , Corey further teaches the response instructions comprise: instructions to provide a visible alert signal, instructions to provide an audible alert signal, instructions to begin displaying, through the video display circuit, the AV content from the selected channel in which the match was located, instructions to display the CC content part from the selected channel in which the match was located, instructions to capture a video still image by the video still image capture unit from the video portion of the digital A/V signal of the selected channel in which the match was located, instructions to record the A/V content of the selected channel in

which the match was located, instructions to record the CC content part of the selected channel in which the match was located; or a combination thereof (column 6, lines 30-68, column 10).

Regarding claim 9, 26,27 and 49, Corey further teaches the captured part of the digital AV signals for each selected source comprises CC content; and the CC content of each selected channel is displayed for viewing (column 5, lines 60- column 6, line 3, column 10).

Regarding claims 21, Corey teaches the indexing of the capture based on save criteria (column 6, line 32 to column 7, line 18

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 13-14,35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corey et al in view of Auld et al (6,556,193) .

Regarding claims 13, 14 ,35 and 36, Corey fails to specifically teaches the using of a PAL/ NTSC encoder and DAC for receiving connect to a channel receiver . Auld teaches the using of two output connections to an PLM/NTSC encoder for receiving signal of a channel and a output connection having a

progressive monitor encoding circuitry (Fig. 1, column 6, lines 1-15). It would have been obvious to one of ordinary skill in the art to modify Corey with Auld by using the teaching of Auld for providing a PAL/NTSC encoder and a progressive monitor encoding circuitry with the apparatus of Corey thereby enhancing the capacity of the apparatus of Corey in handling the signal to be displayed in different formats.)

Claims 29 ,30 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corey et al in view of Broadwin et al (5,929,850).

Regarding claims 29,30 and 50, Corey fails to teaches a web programming 29. A method as defined in claim 15 further comprising the step of providing one or more AV channels comprising a DVD source, a broadcast programming source, and a web programming site.

Broadwin teaches an apparatus for receiving an AV channel as a web-programming site (column 1-2) . It would have bee obvious t one of ordinary skill in the art to modify Corey with Broadwin by incorporating a circuitry with the apparatus for receiving web programming site thereby enhancing the capacity of the apparatus of Corey for additionally receiving web-programming site as a source of AV signal .

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Corey et al in view of Wang (6,289,163).

Regarding claim 19, Corey fails to teaches the video criteria comprises a match within a predetermined tolerance between the video still image an and a predetermined image. Wang teaches an apparatus for produce a video criteria comprises a match within a predetermined tolerance between the video still image an and a predetermined

image (Abstract). It would have been obvious to one of ordinary skill in the art to modify Corey with Wang by using the teaching of Wang with the apparatus of Corey for defining a video criteria that comprises a match between the video still mage and a predetermined image thereby enhancing the apparatus of Corey in dining a video criteria .

9. Claim 6, 20 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corey et al in view of Hibi et al (6,289,163).

Regarding claims 6, 20 and 47, Corey fails to teaches indicating a change in the AV content of a select channel upon a match in the audio criteria for the selected AN channel.

Hibi teaches an apparatus having means for indicating a change in a selected AV channel based upon an audio criteria (column 25, lines 27-50).

It would have bee obvious to one of ordinary skill in the art to modify Corey with Hibi by using to teaching of Hibi with the apparatus of Corey for indicating a change of AV content of a selected channel based upon an audio criteria thereby enhancing the capacity of the Corey apparatus for indicating a change of AV content .

10. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Corey et al in view of Tsukagoshi (5,731,847).

Corey fails to teaches the CC is played with a second rate that is different from a first rate . Tsukasoshi teaches that apparatus that comprises a control means for play the CC (subtitle) with a second rate that is different from first rate (column 10, lines 35-50). It would have been obvious to one of ordinary skill in the art to modify

Corey with Tsukasoshi by using a control mean s as taught by Tsukagoshi with the apparatus of Corey for playing the CC with a second rate that is different from the first rate of receiving the CC thereby enhancing the capacity of apparatus of Corey in handling the various speed reproduction of CC .

11. Claims 29-30 and 32-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Corey in view of Orr.

Regarding clams 29-30 and 32-34, Cory further teaches search for captured CC data for a plurality of channels (column 4, lines 50-65) but fails to teaches a channel source is a DVD source . Orr teaches an apparatus having a receiving means for receiving DVD source and searching the captured CC data.

It would have been obvious to one of ordinary skill in the art to modify Corey with Orr by providing the Corey apparatus with a receiving means as taught by Orr for receiving DVD source as an addition source thereby enhancing the capacity of the apparatus of Corey for handling the DVD source .

12. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al in view of Broadwin et al.

Regarding claim 44, Maruyama fails to teaches that the source of the A/V signal further comprises a World Wide Web source.

Broadwin teaches a apparatus for receiving AV channel as web programming site (column 1-2) . It would have bee obvious t one of ordinary skill in the art to modify Maruyama with Broadwin by incorporating a circuitry with the apparatus for receiving

web programming site thereby enhancing the capacity of the apparatus of Maruyama for additionally receiving web-programming site as a source of AV signal .

Allowable Subject Matter

13. Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Welsh teaches an apparatus for comparing the caption in a video signal with a stored text to control a recording of video signal. Adams teaches apparatus for de-interlacing and scaling a video signal.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T NGUYEN whose telephone number is (703) 305-4775. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H.N

HUY NGUYEN
PRIMARY EXAMINER